



Patent  
Attorney Docket No. 0302670-0004

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

**MARK M. WANG, et al.**

Serial No.: 09/845,245

Filed: April 27, 2001

For: Methods & Apparatus For Use Of  
Optical Forces For Identification,  
Characterization and/or Sorting Of Particles

Group Art Unit: 1651

Examiner: Jon P. Weber

### INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97–1.98, information relating to the above-identified application is hereby disclosed. The accompanying Form PTO SB/08A provides a listing of documents that may be relevant to the subject application.

It is requested that the Examiner fully consider the art cited in the accompanying Form PTO SB/08A, initial the left-most column of the form adjacent each cited reference, and return a copy for Applicants' records. It is further requested that the art be cited on the cover of any patent issuing from the subject application.

In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above, but before the mailing date of either a Final Action under

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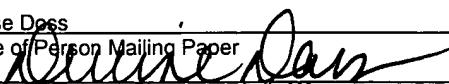
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This statement should not be construed as a representation that more material information does not exist or that an exhaustive search of the relevant art has been made. Nor does this statement constitute an admission by Applicants or Applicants' agent that the information provided herein is necessarily prior art to Applicants' invention. Moreover, Applicants reserve the right to establish the patentability of the claimed invention over any of the listed documents should they be applied there-against as references. Please charge any deficiency or credit any overpayment to Deposit Account No. 50-2862.

Respectfully submitted,

O'MELVENY & MYERS LLP

Dated: 5/17/01

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Application Number	09/845,245
Filing Date	April 27, 2001
First Named Inventor	Mark M. Wang et al.
Group Art Unit	1651
Examiner Name	Jon P. Weber

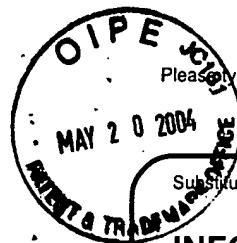
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0302670-4 (prev. 263/168)

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	US-3826899		Ehrlich et al	07/30/1974	
	US-4939081		Figdor et al	07/03/1990	
	US-5374556		Bennett et al	12/20/1994	
	US-5472550		Periasamy	12/05/1995	
	US-5677286		Shull et al	10/14/1997	
	US 5752606		Wilson et al	05/19/1998	
	US-5834208		Sakano	11/10/1998	
	US-5998152		Lynch et al	12/07/1999	
	US-6008010		Greenberger et al	12/28/1999	
	US-6355491	B1	Zhou et al	03/12/2002	
	US-6387331	B1	Hunter	05/14/2002	
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	US-6408878	B2	Unger et al	06/25/2002	
	US-6411838	B1	Nordstrom et al	06/25/2002	
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	US-6507400	B1	Pina et al	01/14/2003	
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	US-6624940	B1	Grier et al	09/23/2003	
	US-2002/0025529	A1	Quake et al	02/28/2002	
	US-2002/0037542	A1	Allbritton et al	03/28/2002	
	US-2002/0181837	A1	Wang et al	12/05/2002	
	US-2003/0008364	A1	Wang et al	01/09/2003	

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	ARLT et al, "Moving Interference Patterns Created Using The Angular Doppler Effect", Optics Express, 10, 16, 2002, 844-852.	
	ASHKIN, "The Pressure Of Laser Light", Scientific American, 226, 2, 1972, 63-71.	
	BUICAN, "Automated Cell-Separation Techniques Based On Optical Trapping", ACS Symposium Series, 464, 1991, 59-72.	
	GROVER et al, "Automated Single-Cell Sorting System Based On Optical Trapping", Journal of Biomedical Optics, 6, 1, January 2001, 14-22.	



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	MACDONALD et al, "Trapping & Manipulation Of Low Index Particles In A Two Dimensional Interferometric Optical Trap", Optics Letters, 26, 12, 2001, 863-865.
	MARKX, et al, "The Dielectrophoretic Levitation Of Latex Beads, with Reference To Field-Flow Fractionation", Journal of Physics D: Applied Physics, 30, 17, 1997, 2470-2477.
	MOLLOY et al, "Lights, Action: Optical Tweezers", Contemp. Physics, 43, 4, 2001, 241-248.
	MOLLOY et al, "Optical Tweezers In A New Light", J. Modern Optics, 50, 10, 2003, 1501-1507.
	PRIEVE, "Use Of Optical Forces To Detach Single Microscopic Particles Adhering To Flat Surfaces In Aqueous Media", Proceedings Of The Annual Meeting Of The Adhesion Society, 20 <sup>th</sup> , 1997, 151-153.
	ZEMENEK et al, "Optical Trapping Of Rayleigh Particles Using A Gaussian Standing Wave, Optics Communication, 151, 4, 5, 6, 1998, 273-285.

Examiner Signature	Date Considered
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